DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER PROTECTION BUREAU
Metcalf Building, Helena, Montana 59620
(406) 444-3080

ENVIRONMENTAL ASSESSMENT (EA)

Division/Bureau: Permitting & Compliance Division, MPDES Permits;

Project or Application: City of Fort Benton, Wastewater Treatment Facility, Permit Renewal MT0021601

Description of Project: This is for the reissuance of a wastewater discharge permit issued to the City of Fort Benton under the Montana Pollutant Discharge Elimination System (MPDES). Discharge is to the Missouri River. The Missouri River is classified as a B-3 waterbody by the Montana Surface Water Quality Standards. The permittee operates a three-cell aerated lagoon system. Discharge is continuous and is either routed to an infiltration cell or discharged directly to the Missouri River. The permittee does not disinfect treated wastewater prior to discharge.

Benefits and Purpose of Proposal:

Benefits from issuing this permit would ensure adequate treatment of domestic sewage before discharging to surface water. Re-issuance of this permit will allow for additional monitoring during the permit term.

Description and analysis of reasonable alternatives whenever alternatives are reasonably available and prudent to consider:

None

Listing and appropriate evaluation of mitigation, stipulations and other controls enforceable by this or another government agency:

None

Affected Environment and Effects from the Proposed Project:

Key to Rank	
NA	*Not applicable*
N	*No effects*
B	*Potentially beneficial effects*
A	*Potentially adverse effects*
M	*Corrective action required*
P	*Additional permits will be required*

Rank	Consideration	Remarks
	PHYSICAL AND BIOLOGICAL ENVIRONMENT	
N	1. SOIL SUITABILITY, TOPOGRAPHIC AND/OR GEOLOGIC CONSTRAINTS (soil moisture, unstable soils or geologic conditions, steep slopes, erosion potential, subsidence potential, seismic activity)	The facility is built on a bench in the floodplain of the Missouri River. Facility has been in this location since at least the early 1970's. The underlying geology is unconsolidated Quaternary alluvium; bedrock is exposes on surrounding bluffs. The facility footprint is under lain by Havre-Glendive complex, which is sandy loam to loam. The Havre soil is "somewhat limiting", while the Glendive soil unit is "very limiting" for lagoon construction. The "very limited" classification is used for soils that have 1+ undesirable feature for a specific use.

N	2.	HAZARDOUS FACILITIES (power lines, hazardous waste sites, distances from explosive and flammable hazards including chemical/petroleum storage tanks, underground fuel storage tanks and related facilities such as natural gas storage facilities and propane tanks)	Facility is a wastewater treatment facility that serves a small community with no significant industrial dischargers. No hazardous materials will be used or stored onsite.
N	3.	AIR QUALITY (effects to or from project, dust, odors, emissions)	Facility uses aeration which could minimize odors.
N	4.	GROUNDWATER RESOURCES & AQUIFERS (quality/nondegradation, quantity/reliability, distribution, uses/rights, number of aquifers, mixing zones)	A search of the GWIC database shows several wells have been completed in Fort Benton, but in the immediate area of the wastewater treatment facility (0.5mi-radius), no wells have been completed. Most wells are shallow and completed in the alluvial aquifer. Typical wells depths are 20-40 feet and static water levels in the town site are between 10-20 feet below the surface. The wells completed nearer the wastewater treatment facility, north east of town, have a deeper static water level of 30'+. A Source Water Delineation and Assessment Report was completed by the Department in March, 2004. The alluvial aquifer is unconfined and unconsolidated and has "high source water sensitivity".
N	5.	SURFACE WATER RESOURCES (quality/nondegradation, quantity/reliability, distribution, uses/rights, storm water controls, source of community supply, community treatment, mixing zones)	Discharges are regulated by limits established in the permit. All pollutants discharged meet National Secondary Standards, Non-Degradation or Water Quality Based Effluent Limitations to protect the receiving water quality.
N	6.	VEGETATION AND WILDLIFE SPECIES AND HABITATS, INCLUDING FISHERIES AND AQUATIC RESOURCES (threatened, endangered, sensitive species, prime habitat, population stability, potential for human wildlife conflicts, effectiveness of post-disturbance plans)	A survey of the Natural Heritage Program identified 4 species of concern – three fish and a turtle. The blue sucker, sturgeon chub, and sauger are present in the Missouri River near Fort Benton and are listed by the BLM as "sensitive"; the sturgeon chub is also listed as "sensitive" by the USFS. The Spiny softshell, a turtle, is a "sensitive" species, as listed by the BLM.
N	7.	UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES (biologic, topographic, wetlands (within one mile), floodplains (within one mile), scenic rivers, natural resource areas, etc.)	No additional impacts to the environment will occur because the facility has long been established at the site.
N	8.	LAND USE (waste disposal, agricultural lands [grazing, cropland, forest lands, prime farmland], recreational lands [waterways, parks, playgrounds, open space, federal lands), access, commercial and industrial facilities [production & activity, growth or decline], growth, land-use change, development activity)	No changes in land use at the permitted facility will occur during the permit cycle.
N	9.	HISTORICAL, CULTURAL, & ARCHEOLOGICAL (sites, facilities, uniqueness, diversity)	The current facility has been in this location for decades.
N	10.	AESTHETICS (visual quality, nuisances, odors, noise)	The wastewater facility has been in the current location for decades. Urban development is low.
N	11.	DEMANDS ON OR CHANGES IN ENVIRONMENTAL RESOURCES INCLUDING LAND, WATER, AIR, OR ENERGY USE (need for new or upgraded energy sources, potential for recycling, etc.) {See (4), (5), and (8).}	No impacts are expected.

Rank	Consideration	Remarks
	IMPACTS ON THE HUMAN POPULATION	
NA	12. CHANGES IN DEMOGRAPHIC CHARACTERISTICS (population quantity, distribution and density, rate of change)	No impacts are expected.
N	13. GENERAL HOUSING CONDITIONS (quality, quantity and affordability)	No impacts are expected.
NA	14. POTENTIAL FOR DISPLACEMENT OR RELOCATION OF BUSINESS OR RESIDENTS	None
N	15. PUBLIC HEALTH AND SAFETY (medical services and facilities, police, fire protection and hazards [see (2)], emergency medical services [see (8), LAND USE for waste disposal])	Public health and safety will be improved by treating the community's domestic sewage prior to discharge.
N	16. LOCAL EMPLOYMENT AND INCOME PATTERNS (quantity and distribution of employment, economic impact)	No changes to employment or income patterns are expected.
NA	17. LOCAL AND STATE TAX BASE AND REVENUES	If, due to permit conditions, the facility fails to provide the level of treatment to prevent pollutants from being discharged to state waters, the facility may have to raise sewer rates to cover development and construction costs.
NA	18. EFFECTS ON SOCIAL STRUCTURES AND MORES (social conventions/standards of social conduct), DEMANDS ON SOCIAL SERVICES (law enforcement, educational facilities [libraries, schools, colleges, universities], welfare, etc.)	No impacts are expected at this time.
NA	19. TRANSPORTATION NETWORK (condition and use of roads, traffic flow conflicts, rail, airport compatibility, etc.)	No impacts are expected at this time.
N	20. CONSISTENCY WITH LOCAL ORDINANCES, RESOLUTIONS, OR PLANS (conformance with local comprehensive plans, zoning or capital improvement plans)	No impacts are expected at this time.
N	21. REGULATORY RESTRICTIONS ON PRIVATE PROPERTY RIGHTS (*Are we regulating pursuant to a police power? Does the Agency action restrict the use of the property beyond the minimum necessary to achieve compliance with the Act? What are the costs of such additional restrictions resulting from proposed permit conditions? Are there other, less restrictive ways of achieving the same goal?* See your assigned legal counsel for assistance preparing this section. [See the Private Property Assessment Act checklist accompanying this permit for details.]	The limits set within the permit do not impose unnecessary demands on the Permittee at this time. Issuance of the permit will not affect private property.

Other groups or governmental agencies contacted or which may have overlapping jurisdiction:

None

Public Involvement:

Thirty-day public comment period, beginning in January 2007

Individuals or groups contributing to this EA:

State of Montana, DEQ Permitting & Compliance Division

Summary of Issues:

See Statement of Basis

Summary of Potential Effects:

See Statement of Basis

Cumulative Effects:

None

Recommendation:

Grant the Surface Water Discharge permit

Recommendation for Further Environmental Analysis:

☐ Prepare an EIS ☐ Prepare a more detailed EA ☒ No further analysis

EA prepared by: Rebecca Ridenour Date: September 2006

Bureau Check-off

AWMB _____	CSB _____	EMB _____
IEMB _____	WPB _____	Other _____

Approved by:

Bonnie Lovelace, Chief
Water Protection Bureau

_____ _____

(Signature) (Date)